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TITLE	Group Process Training Materials.
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ABSTRACT

The training program for which these materials have been developed is divided into two parts: the first is general, theoretical, and cognitive; the second is specific, practical, and applied to actual situations. The first part provides a highly structured, non-threatening learning situation, and makes extensive use of set exercises; the second reintroduces the complexities of actual tasks and personalities and generates the content of the exercises from the participating teams. The program deals with problem solving in staff differentiation, in the classroom, and in faculty-student-parent-administration-community relations. Participants twice go through the processes of problem solving and group dynamics included in the program, once to master the concepts and techniques involved, and once to apply them to actual situations. As well as an outline of the trainer's manual, the document includes the following excerpts from the training materials: 1) problem solving models, unit 2 (problem solving in groups); 2) glossary of terms for day 1; 3) block exercise; and 4) communication module, unit 4 (perception and listening skills). (MBM)

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GROUP PROCESS TRAINING MATERIALS

Developed for the

STANFORD SECONDARY TEACHER EDUCATION PROGRAM

INSTRUCTIONAL TEAM TRAINING PROJECT

Contents

[illegible]

CERA Presentation

1. Participants and agenda:

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I. History of the Project

II. Rationale for the Development of the Training Curriculum

III. The design of the curriculum

IV. An Illustration: The Problem Solving Models and the Block Exercise

V. Summary, Question period.

2. Group Process Training Materials - Introduction:

The development of the group processes training materials is firmly rooted in research, development and training from the field of group dynamics. For example, an instructional team is assumed to function as a social unit that has the task of developing presenting and evaluating its curriculum. In addition, the classroom is viewed as a social system which has its own values, status positions, and structures. Another assumption underlying the construction of the training materials is that within a group, individuals play different roles depending on the task, the structure of the group, and their functional abilities. The consequence of this last assumption is that the training materials have to provide instructional teams with the ability to change with each new task. As a consequence of task change, the structure of the group also changes, and different abilities become relevant.

Problem Solving and Group Processes in Education:
A Brief Description of the Training Program
Developed for the Stanford EPDA Project

I. Introduction to the Training Program

A. The Role of Problem Solving and Group Processes in Education

1. in Staff Differentiation
2. in the Classroom
3. in Faculty - Student - Parent - Administration - Community Relations

B. The Two-Part Structure of the Training Program

The training program is divided into two parts: the first general, theoretical and cognitive; the second specific, practical, and applied to actual situations. Participants go through the processes of problem solving and group dynamics included in the program twice: first in order to master the concepts and techniques involved, and again to apply them to actual situations. The first part makes extensive use of set exercises; the second generates the content of the exercises from the participating teams. The first part provides a highly structured, non-threatening learning situation; the second reintroduces the complexities of actual tasks and personalities.

C. The Experience of being in a Group. Experiential Introduction and first Exercise: the Game of Siamese Gasoball.

This exercise contains the components of problem solving and group process which participants will meet in the training program.

D. Two Problem Solving Models:

Two models for problem solving are introduced immediately: one dealing with task; one with process. These provide a [illegible] framework and point of reference throughout the program. The first model contains five stages:

1. problem sensing
2. problem definition
3. decisions about how to proceed
4. generation of alternative solutions
5. evaluation of alternatives and decision.

The second model focuses on three phases in the changing dynamics of the group:

1. orientation
2. evaluation
3. control.

II. The Components and Processes of Problem Solving.

A. The experience of problem solving, and second exercise: The Pooling of Information.

1. In this exercise each participant is given a set of five questions and yes or no answers to them. The task is to establish to what the questions refer. Each participant may not show his questions to the others, but he may share them in any other way. Only by pooling the information can the correct answer be found.
2. This exercise enables participants to experience problem solving and to assess the status of their problem solving skills. It also provides an initial point of comparison: this exercise will be repeated at the conclusion of the section on components and processes.

B. Communication and Perception: A Series of three exercises and a video tape concerned with the problems of communication and perception.

1. Feedback.

In this exercise a communicator attempts to give accurate instructions which will enable other group members to draw three rectangles correctly, under four different conditions of feedback. The exercise demonstrates the importance of free feedback.

2. Echolalia.

In this exercise two participants discuss an issue, but the person spoken to cannot reply until he has restated what the speaker said. The exercise focuses on listening.

3. Perception Biases.

In this exercise participants are presented with pictures of ambiguous situations and asked to describe, not interpret, each scene. The exercise develops an awareness of perceptual biases.

4. The video tape illustrates modes of verbal and other kinds of communication, feedback patterns, and communication problems in a lesson taught to junior high school students.

C. Task and Process Observation Skills

The Communication unit focuses upon the individual; the present unit begins to look at group processes and groups at work performing tasks. The two exercises in this unit concern the relationship between task and process, and the role and influence of individual members within the group.

During this unit also, participants will be learning the skills of observing and identifying what transpires as groups perform tasks.

1. The Relation between task and process.

a. Exercise:

In this exercise, groups of participants are asked to perform an easy task and an impossible task within eight minute time periods. The exercise reveals the influence of the nature of the task upon group processes.

b. Observation Skills:

Each participant gains experience using three instruments:

(1) a who talks to whom tabulation

(2) a scale of verbal behavior

(3) a non-verbal behavior observation

In the following discussion the data gathered serves as a basis for exploring the ways in which the group functioned.

2. Role and Influence

a. The NASA Exercise

In this exercise groups are asked to arrive at a consensus ranking of the usefulness of a list of items for survival on the moon.

b. Observation Skill

Each participant is asked to rank the members of his team according to their contributions to performing the task. The data again serves as a basis for discussion.

D. The Heuristics of Problem Solving

This unit concentrates on methods of solving problems.

1. Review of the Problem Solving Models

2. The Block Exercise

In this exercise each group receives 22 blocks which they must correctly divide into four groups. Subsequent discussion includes listing the heuristics which were or might have been employed in solving this problem.

3. Role Playing

This exercise introduces one heuristic; role playing. In it participants are given roles to play in a simulated problem solving situation.

E. Summary and Review.

The Second Pooling of information exercise.

III. Concrete Applications

In this section the skills and concepts learned in the previous section will be applied to actual (or simulated) functioning teams of which the participants are members. This section consists of two parts: Problem Solving, and Group Maintenance.

A. Problem Solving

After a review of the model, participants will list problems [illegible] they feel are facing them, choose one to deal with, and [illegible] the process of solving the problem, using the problem-solving models and heuristics including role playing.

B. Group Maintenance and Emotionality

1. Emotionality: Its Role in Group Functioning.
2. The Reaction to Group Situations

Test of Emotionalities

This test presents a series of group situations which enable participants to assess themselves in respect to their work orientation and four emotionalities: flight, fight, pairing and dependency. The test provides data which may provide a point of departure for individual or group assessments of the individual's role in the group.

3. The How it Feels Here Test.

This instrument provides individual and group assessments of the health of the particular group, and also offers data which may be used as a point of departure for a group assessment.

4. Group Maintenance.
   a. Discussion of Methods of Group Maintenance and Strategies of Intervention
   b. The concluding exercise consists of a simulation situation which offers participants numerous opportunities to test a variety of intervention strategies to identify and cope with emotionalities in order to build a healthy and effective problem solving group.

II. Problem Solving in Groups

A. Two Problem Solving Models (Unit 2)

1. Linkages

At this point participants have received an overall introduction to the training program (Unit 1). They will have heard the background, general aims and components of the training program described, and they will have taken part in an experiential introduction to group processes and a discussion of it which touches upon certain common principles of group processes which will constitute common threads throughout the training program.

The present unit serves as an introduction to the first of the two major parts of the training program, that section which teaches conceptual and theoretical principles. The "Problem Solving in Groups" section seeks to identify the major components and processes which enter into problem solving in groups. This unit provides two problem solving models which are intended to provide conceptual frameworks, organizing points of reference for this entire section, as well as for the entire training program. The models provide organizers a common vocabulary, and an overall orientation, the individual components of which will be studied in detail in succeeding units.

In addition, this unit focuses on the problem-solving component of The Group Processes Training curriculum. It seems appropriate to emphasize often that the training program is directed toward facilitating the solution of problems in the work situation in the schools; particularly after the experience of Siamese baseball, a gentle reminder that examination and understanding of group processes contribute to improved problem solving skills back at school may be in order.

The conceptual lecturette in this unit is to be followed immediately by a concrete experience in problem-solving.

2. Statement of Purpose

This unit describes two problem solving models in order to provide participants with an overview of the problem solving process and a common vocabulary with which to discuss it.

This unit offers two ways of looking at the steps which enter into the process of solving problems; it identifies some of the components of this process; and it also distinguishes between individual and group problem solving.

3. Protocol Features: The materials in this unit are presented in order that participants may gain some understanding of

   a. how problem solving may be conceptualized

   b. two problem-solving models

   c. some differences between individual and group problem solving

4. Training Component: Participants should be able to

   a. employ the terminology from the two models in discussing their own efforts to solve problems (for example) in the exercise which follows.

   b. identify and distinguish between the various stages of the problem solving process in discussing their own problem solving efforts.

5. Instructions to the Trainer

   a. If the "glossary for day one" has not been introduced during the discussion of the Chinese baseball exercise, it should be introduced and read together at this point, before the lecturette on the models.

   b. In order to understand the differences between the two models and the different facets of the problem solving process which they describe, participants must understand the distinction between task and process.

   These terms are contained in the glossary. The trainer should discuss them with the group and illustrate them sufficiently until he is confident that participants grasp this distinction.

   c. Make a particular effort to be certain that participants understand why they are being given these models.

d. It's a lecture. Liven it up any way you can.

e. Provide an opportunity for questions and discussion.

6. Content of the Unit

a. Schedule of events

(1) introduce the glossary and discuss in particular the distinction between task and process.

(2) describe the two models (lecturette)

(3) questions and discussion

1. Glossary for day 1

As we proceed through this training program, it will be helpful if we can share a commonly understood and agreed upon vocabulary. Here are some simple but basic terms:

1) Goal: Synonymous with end, objective, and purpose. The goal is what is to be achieved; that which a person or group intends to achieve. Some change is required to achieve the goal. In purposive actions there is always an idea of a future goal, or end, and of the means of its attainment.

2) Group: most simply defined, a group is a collection of individuals interacting with each other, sharing a common goal, and characterized by a) expectations for group behavior (norms), and b) individual behavior (roles).

3) Norm: A standard shared by the members of a social group to which the members are expected to conform and conformity to which is enforced by positive and negative sanctions.

4) Role: Refers to the set of expectations which group members show concerning the behavior of a person who occupies a position in the group. The position is the determining factor: different required and expected behaviors which are functionally independent of the individual who occupies them (i.e. teacher, doctor, long shoreman, football player).

5) Maintenance: Those activities directed toward preserving the group as a productive and cohesive unit.

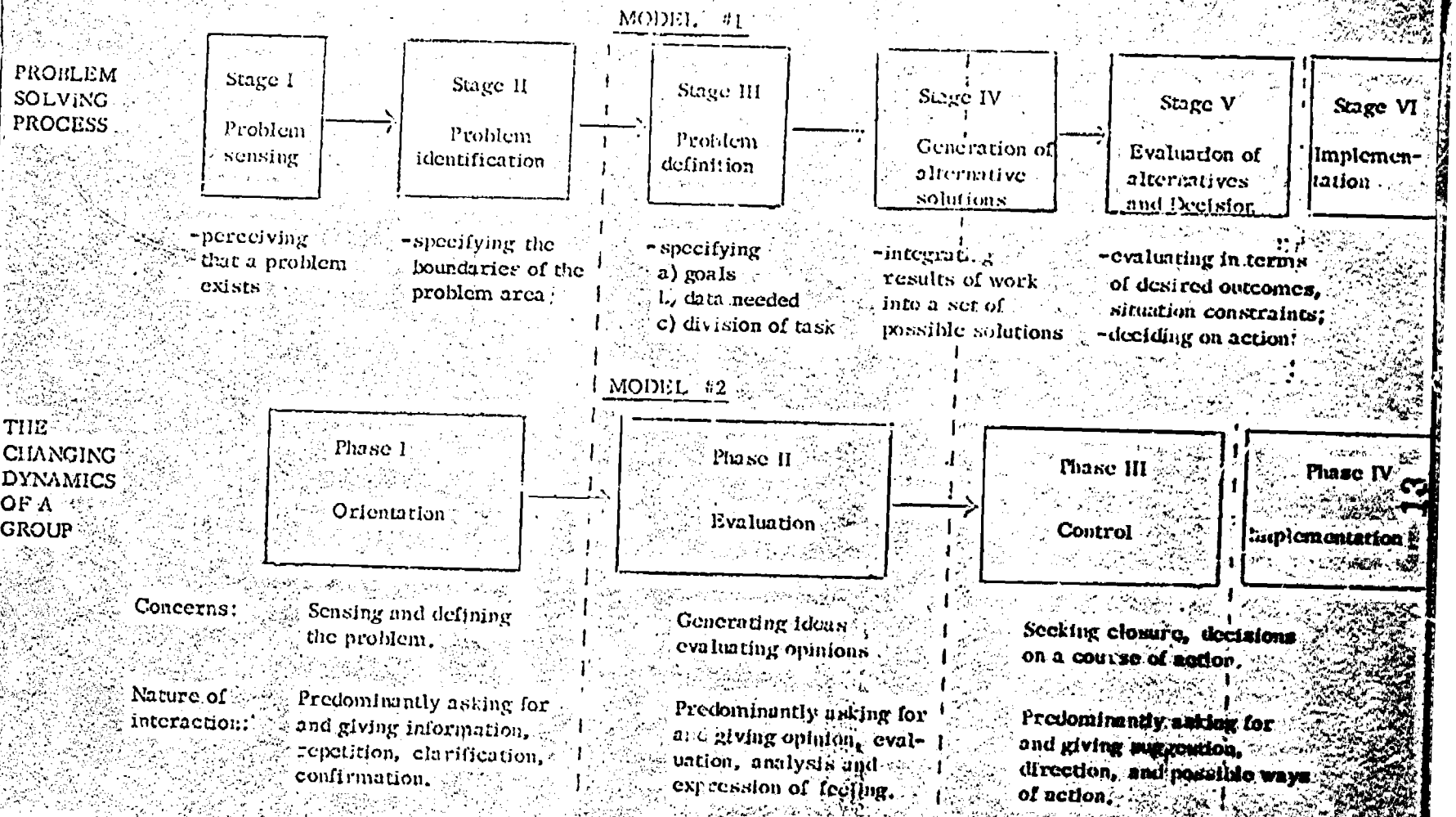
6) Influence: The term is used to denote changes in behavior of a person or group due to others, their actions, or to participation of their responses. In this sense the term connotes the quiet and possible gradual exertion of power and persuasion.

7) Task: What needs to be done in order to achieve the goal; what has to be done in order to bring about the changes which must occur to reach the goal.

8) Process: Process is, unfortunately, one of the most vague terms in social science. At one extreme it is a general term which can denote almost any aspect of social interaction. At the other extreme it can denote a continuous sequence of social activities rigorously defined on the basis of

of empirical research. In its most frequent use, the term means a transition or series of transitions between one social condition and another. Process, therefore refers to what takes place between the starting and ending points, the actions events and changes which occur from the beginning to the end result either achieving or failing to reach the goal.

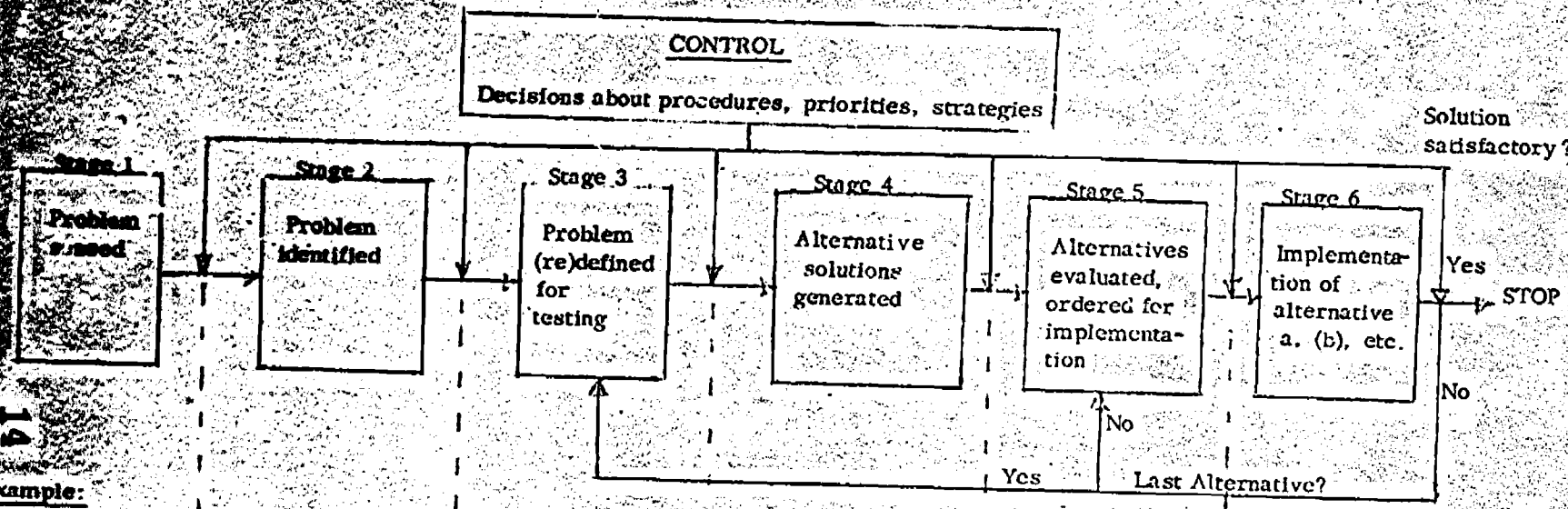
HANDOUT: FRAMEWORK FOR PROBLEM SOLVING IN GROUPS



Note: This chart is arranged in logical, not necessarily temporal, sequence.

JOHNNY'S PROBLEM

AN APPLICATION OF THE PROBLEM-SOLVING MODEL



Example:

Johnny's anomolous behavior:
"Johnny failed a math test. He's never done that before. I wonder what happened?"

Verification that the problem exists as perceived:
"Could be a chance occurrence - I'll wait a few days, to see if a problem exists as I perceive it."

Johnny is still exhibiting difficulty. His attention wanders. The problem appears to be one of 'motivation'."

1. Give Johnny some special attention.
2. Give Johnny warmth, support.
3. Give Johnny extra help.

Eliminate some alternatives. Arrange priorities for testing the remaining alternatives.

Test alternative a, and evaluate on the basis of consequences.

D. The Heuristics of Problem Solving

This module has three objectives:

a) The teams should be able to look critically at their ability as a group to engage in problem solving. Specifically, the first exercise is aimed at application of the problem-solving model introduced earlier to the solution of a simple problem, and at the development of problem-solving skills through practice, observation and discussion.

b) The teams should be able to recognize that the usefulness of the model is limited by the characteristics of the task, and by the style of working together which has evolved within the group. The cyclical nature of problem solving will be demonstrated by directing the attention of participants to the way in which their progress in the task loops back through several of the stages as they proceed toward a solution.

c) The teams will be able to define the concept of "heuristic", and recognize the heuristic nature of many aspects of the problem-solving process. They will learn to apply a useful heuristic device, role playing, to team-related problems. Other heuristics, appropriate to specific classes of problems, will be discussed.

1. Review of the Problem Solving Models

To the trainer: Consult the section of the manual which introduces the two problem solving models. Review the stages of the first model briefly. Refer participants to the flowchart "Johnny's Problem" introduced in part I. D. of the program.. Draw attention specifically to the Control component appearing in both this flowchart and in the second of the problem solving models - the Dynamics of the Problem Solving Process. This phase of the models involves choosing of problem-solving strategies appropriate for the specific task. Since problems confronting a group can vary along many dimensions, a certain amount of "educated guessing" inevitably enters into the decision as to which approach will be most appropriate. More formally, such "educated guesses" are one class of heuristic devices.

The Block Exercise

1. Purposes:
   a) to gain experience in working cooperatively on a common problem.
   b) to apply the problem-solving model to a simple problem.
   c) to identify strategies, techniques, heuristics which relate to each stage of the model.
   d) to examine dimensions along which problems vary.
   e) to explore, through discussion, application of strategies identified by the group to "real" p oblems.
   f) to practice observation skills, focussing on interactions which contribute to the solution of the problem.

2. Protocol Features:
   Develops skill in group problem solving by
   a) Practice - practicing the techniques
   b) Observation - watching critically the problem-solving behaviors of others
   c) Exploration of strategies, and the conditions under which they are useful.

3. Training Objectives:
   a) participants will be able to recognize and provide instances of
      - heuristics, techniques and strategies for problem solving.
      - behaviors identified with each stage of the problem solving model.
   b) participants will be able to demonstrate skill in observing and recording accurately the content of conversation related specifically to the problem-solving process:
      - seeking information, opinion, suggestion
      - giving information, opinion, suggestion.
   c) participants will be able to identify particular skills relevant to problem solving possessed by members of their own group; e.g., "idea man", organizer, synthesizer, summarizer, moderator.

4. Materials:

Kasanin-Hanfmann Concept Test - 1 for each group.
Copies of Problem Solving Strategies Observation Sheet
Copies of Handout: Heuristics for Problem Solving

5. Sequence of Events:

During the following exercise, two groups will test strategies for solving a problem. The third group will act as observers. Their task will be to keep a record of the various strategies which group members suggest, and adopt or reject. The data which they collect will provide a starting point for discussing problem solving strategies and heuristics.

C. Communication

1. Perception (Unit 4)

II. Trainers Introduction to the Unit

A. Theoretical Considerations

1. Linkages

a. A substantial section on communication is placed first in the Principles and Processes of Group Problem Solving part of the program, because communication is the beginning point of all group work. The section on communication is a substantial one because of the importance of communication in all group processes. Participants have great need of understanding and skills in this area.

b. The units within the communication section are organized so as to move from the individual outward.

(1) The first unit concerns the way the individual perceives what occurs outside him; in fact, it deals mainly with the sense of sight. It demonstrated the ways in which visual perception is distorted, and seeks to develop awareness and skills which will compensate in part for these distortions and biases.

(2) The second unit concerns listening or auditory perception: it seeks to develop an awareness of the difficulty of listening well. The first part of the unit takes a look at the listener, and at some obstructions to effective listening. Listening usually involves a second person, communication between two people; part two of the unit focuses on a dialogue between two people.

(3) The third unit deals with communication between an individual and a group. It incorporates the principles of the first two units and moves beyond them into the area of group processes; it also has particular applications to teaching.

(4) The fourth unit, a videotape presentation, depicts these principles in operation in a classroom. (Optional - could be develop through discussion).

(The order of these units could be changed by placing units 4 and 3 at the beginning of the section. If this were done the first unit would stress diagnosis and the importance of communication in education, and the remaining units would move from the more neutral and mechanical to the more personal.)

2. Purposes:

a) to develop an awareness of the perceptual processes.

b) to develop sensitivity to the concept of perception as a constructive activity by which the individual "makes sense" of what he sees

c) to begin developing skills of accurate, unbiased observation.

d) to develop skills in data collection.

e) to demonstrate the use of public data in compensating for individual perceptual biases in groups.

3. Protocol Features:

This unit seeks to develop in the participants,

a) an understanding of the processes of perception sufficient to deal effectively with the phenomenon of perceptual bias in groups.

b) an awareness of perceptual biases as they appear
- in one's own perceptions
- in the perceptions of others

c) an understanding of some processes by which perceptual biases arise.

d) an understanding of some specific sources of perceptual biases:
- culturally and socially derived expectations
- projections
- the effects of particular experiences
- stereotypes
- prejudices

e) an awareness of specific means of compensating for perceptual biases in problem-solving groups. (For example, the cross-checking of information.)

4. Training Objectives :

a) participants will be able to distinguish between observation and inferences or interpretations.

(i) participants will be able to distinguish when other interpret instead of observing or stating fact.

(ii) participants will be able to identify which statement of their own are observations or inferences.

b) in this and later discussions, participants will raise the possibility of perceptual bias, inquire about the sources of observations, and insist upon cross-checking observations and information.

c) participants will be able to identify some sources of perceptual biases.

d) in particular, they will be able to identify the presence of the following sources of bias in at least some instances:

- stereotypes
- social/cultural expectations
- projection

5. Bibliography and references

B. Information about the Exercise and its presentation.

1. Schedule of Events

a) participants are shown two pictures and write a description of them.

b) the descriptions of each picture are read and discussed; each participant reads his description, and the group discusses the accuracy of his statements.

c) participants are shown two more pictures and asked to write descriptions of them.

d) these descriptions in turn are read and their accuracy discussed.

e) discussion of perception, perceptual bias, its sources and means of dealing with it.

2. The exercise

In this exercise participants are shown four pictures which are ambiguous or which depict people in ambiguous situations. Participants are asked simply to describe two of the pictures; their descriptions are then analyzed by the group in order to distinguish between observation and inferences. Then the participants are asked to describe two more pictures, and their descriptions are analyzed in terms of the growth of their awareness of the differences between observation and inferences. A discussion of perceptual biases and their sources follows.

Listening Skills

A: The listener

1. The Purposes:

a) to focus awareness on factors affecting accurate recall and reporduction of verbal communication.

b) to identify processes involved in listening which may alter the structure (syntax) and content (semantics) of verbal communication.

e.g., Target Sentence: He was struck by a moving van.

Different structure/Same content: A moving van struck him.

Same structure/Different content: He was struck by a moving thought.

c) to identify sources of distortion in verbal communication.

d) to foster accurate, unbiased listening.

2. Protocol Features:

to develop a precision and sensitivity to language with respect to:

a) how language influences thought and action

b) how language may determine or reinforce associative patterns
e.g., culturally defined associates, such as "hot-cold," "table-chair," etc

c) how language can serve to reinforce thought stereotypes

d) how culture influences linguistic expectations that may determine how information is processed prematurely.

e.g., our tendency to complete another's thoughts in a particular way:

"Hope springs - " expectation - "eternal"
alternative completion - "nice this year, and not rainy, like it was last year."

e) how thoughts are organized into patterns that can be edited in order to facilitate response.
- see bibliography for research on organization in free recall.

f) how "cognitive" editing results in a loss of accuracy of recall.

3. Training objectives:

Participants will be able to recognize and provide instances of

a) how language may determine or reinforce associative patterns

b) how language can serve to reinforce thought stereotypes

c) how culture influences linguistic expectations

d) how thoughts are structured and edited for ease of storage and retrieval.

e) how "cognitive" editing results in loss of accuracy of recall.

4. Sequence of Events:

In this exercise participants are read 3 messages. The messages are designed to vary with respect to complexity and ambiguity of content. Participants are asked to reproduce each message, and to indicate how confident they are of the accuracy of their reproduction. Their reproductions are then analyzed in order to identify systematic alterations of the content and/or structure of each message. After discussion, participants are asked to reproduce 3 additional messages. Again reproductions are analyzed in terms of reduced frequency of alterations and/or changes in confidence ratings.

Listening Skills

B: The Dialogue

1. Purposes

a) to illustrate listening skills involved in any verbal exchange between two individuals.

b) to demonstrate how the requirement that the listener respond in a dialogue may present an obstacle to effective listening.

c) to demonstrate how the participants' emotional involvement with the discussion topic may create an obstacle to effective listening.

d) to provide an opportunity to apply knowledge acquired in the previous exercise to a different listening task.

e) to introduce the concept of corrective feedback, and the role which feedback plays in facilitating communication.

2. Protocol Features:

a) to develop sensitivity to the role of emotional involvement in verbal exchanges.

b) to develop sensitivity to the competing demands of listening and responding.

c) to develop awareness of the existence of a variety of techniques for facilitating listening and responding skills:

(i) Decentering
(ii) Making things easier for the listener
(iii) Soliciting corrective feedback
(iv) Developing a common language

3. Training Objectives:

Participants will be able to recognize and give instances of

a) the role of emotional involvement in verbal exchanges.

b) the interference with accurate listening due to the requirement of response.

c) techniques for facilitating listening and responding skills

4. Sequence of Events:

Participants divide into groups of three. Two of the members converse

on an assigned topic, each repeating the content of his partner's message before he may add to the conversation. The repetition must satisfy both the original speaker and the third member, who acts as judge. Roles are then exchanged. Problems of communication stemming from difficulties in listening in this situation are raised and elaborated on in discussion.